

WHAT IS CLAIMED IS:

1. An earphone capable of automatically receiving telephone calls, comprising:

an earphone having an earphone stereo plug and at least one speaker for outputting an audio signal;

a microphone for inputting a voice signal; and

a control device having an earphone stereo socket, a radio stereo plug and a hand-held type mobile phone stereo plug, said earphone stereo socket being coupled to said earphone stereo plug, said radio stereo plug being coupled to a portable CD player or a radio stereo socket of a radio for inputting a stereo audio signal, said hand-held type mobile phone stereo plug being coupled to a hand-held type mobile phone stereo socket of a hand-held type mobile phone for inputting a voice signal;

wherein, in a normal mode of listening to the portable CD player or the radio, said control device controls said speaker to output said stereo audio signal; when said hand-held type mobile phone receives an incoming call, said control device will output a control signal to cause said speaker to output said voice signal of the hand-held type mobile phone.

2. The earphone capable of automatically receiving telephone calls as claimed in Claim 1, wherein said control device further includes:

a first switch loop which has a first contact unit and a second contact unit, said first contact unit being coupled to said radio stereo plug for inputting a right-channel audio signal to said earphone, said second contact unit being coupled to said hand-held type mobile phone stereo plug for inputting said voice signal to said earphone;

a second switch loop which has a first contact unit and a second contact unit, in which said first contact unit is coupled to said radio stereo plug for inputting a left-channel audio signal to said earphone, said second contact unit being coupled to said hand-held type mobile phone stereo plug for inputting said voice signal to said earphone;

a microphone input socket coupled to said hand-held type stereo plug and said microphone for outputting said voice signal received by said microphone to the hand-held type mobile phone; and

5 a control circuit coupled to said first switch loop and said second switch loop for controlling "on" and "off" operations of said first and second switch loops such that when the hand-held type mobile phone receives an incoming call, said control signal generated thereby causes said second contact units of said first switch loop and said second switch loop to be on while said first contact units are disconnected so that said voice signal can be outputted via
10 said earphone.

3. The earphone capable of automatically receiving telephone calls as claimed in Claim 2, wherein said control circuit has a battery to maintain normal operations.

15 4. An earphone capable of automatically receiving telephone calls, comprising:
an earphone having at least one speaker for outputting an audio signal;
a microphone for inputting a voice signal; and

a control device having a radio stereo plug and a hand-held type mobile phone stereo plug, wherein said radio stereo plug being coupled to a portable CD player or a radio stereo socket of a radio for inputting a stereo audio signal,
20 said hand-held type mobile phone stereo plug being coupled to a hand-held type mobile phone stereo socket of a hand-held type mobile phone for inputting a voice signal;

25 wherein, in a normal mode of listening to the portable CD player or the radio, said control device controls said speaker to output said stereo audio signal; when said hand-held type mobile phone receives an incoming call, said control device will output a control signal to cause said speaker to output said voice signal of the hand-held type mobile phone.

5. The earphone capable of automatically receiving telephone calls as claimed in Claim 4, wherein said control device further includes:

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a first switch loop which has a first contact unit and a second contact unit, said first contact unit being coupled to said radio stereo plug for inputting a right-channel audio signal to said earphone, said second contact unit being coupled to said hand-held type mobile phone stereo plug for inputting said voice signal to said earphone;

a second switch loop which as a first contact unit and a second contact unit, said first contact units being coupled to said radio stereo plug for inputting a left-channel audio signal to said earphone, said second contact units being coupled to said hand-held type mobile phone stereo plug for inputting said voice signal to said earphone;

a microphone input socket coupled to said hand-held type stereo plug and said microphone for outputting said voice signal received by said microphone to the hand-held type mobile phone; and

a control circuit coupled to said first switch loop and the second switch loop for controlling "on" and "off" operations of said first and second switch loops such that when the hand-held type mobile phone receives an incoming call, said control signal generated thereby causes said second contact units of said first switch loop and said second switch loop to be on while said first contact units are disconnected so that said voice signal can be outputted via said earphone.

6. The earphone capable of automatically receiving telephone calls as claimed in Claim 4, wherein said control circuit has a battery unit for maintaining normal operations.